



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/821,033

04/07/2004

David R. Ginskey

STTC.112501

9234

5251

7590

03/22/2006

SHOOK, HARDY & BACON LLP
INTELLECTUAL PROPERTY DEPARTMENT
2555 GRAND BLVD
KANSAS CITY,, MO 64108-2613

EXAMINER

GARCIA JR, RENE

ART UNIT

PAPER NUMBER

2853

DATE MAILED: 03/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

Office Action Summary

Application No.

10/821,033

Applicant(s)

GINSKEY, DAVID R.

Examiner

Rene Garcia, Jr.

Art Unit

2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>08 July 2004</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 08 July 2004 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because it fails to list on each page the application number of the application (37 CFR 1.97(a)(1)); fails to provide a heading on each page indicating that the list is an information disclosure statement (37 CFR 1.97(a)(1)). It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the threads of claims 8 and 17, and seal between stem and sealing member with respect to claims 8 & 17 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure

Art Unit: 2853

must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Inkjet Cartridge Cleaning Devices Using Syringe With Alternative Tips

Claim Objections

4. Claim 1 recites the limitation "said member" in lines 4 & 6. There is insufficient antecedent basis for this limitation in the claim.
5. Claim 5 recites the limitation "said receiver" in line 4. There is insufficient antecedent basis for this limitation in the claim.
6. Claim 6 recites the limitation "said receiver" in line 1. There is insufficient antecedent basis for this limitation in the claim.
7. Claim 7 recites the limitation "said member" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Art Unit: 2853

8. Claim 9 recites the limitation "said member" in line 1. There is insufficient antecedent basis for this limitation in the claim.
9. Claim 14 recites the limitation "said receiver" in line 4. There is insufficient antecedent basis for this limitation in the claim.
10. Claim 15 recites the limitation "said receiver" in line 1. There is insufficient antecedent basis for this limitation in the claim.
11. Claim 16 recites the limitation "said member" in line 1. There is insufficient antecedent basis for this limitation in the claim.
12. Claim 18 recites the limitation "said member" in line 1. There is insufficient antecedent basis for this limitation in the claim.
13. Claim 20 recites the limitation "said ports" in lines 3 & 4. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claims 1, 5-7, 10-16, 19-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Kotaki (US 2003/0007029).

Kotaki discloses the following claimed limitations:

*regarding claim 1, system for cleaning a print head/ink ejection opening, Surface A/

Art Unit: 2853

(paragraph 0093; fig. 3A) of an inkjet cartridge/**ink jet cartridge, 8/** (fig. 1) of a printer

(paragraph 0003), said print head having a total number of ejection ports/**ink ejection openings,**

G/ (fig. 3B & 4; paragraph 0093) thereon, comprising: (paragraph 0022 & 0024)

*sealing member/**elastic member, 1/** having first and second ends (fig. 1, 2A, 2B & 4; paragraph 0088)

*conduit defined by said member (fig. 4)

*first opening of said conduit at said first end of said sealing member, said first opening having a cross-sectional area, said first end of said member being fluidly connected to a pressure controller, said pressure controller used to control the pressure in said conduit (paragraph 0099 & 0106; paragraphs 0099-0105 disclose cross-sectional area relationship)

*second opening of said conduit at said second end of said sealing member, said second opening having a second cross-sectional area, said second opening of said conduit being adapted to form sealed fluid communications with one of said number of ejection ports (fig. 4)

*regarding claim 5, pressure controller comprises a syringe/**syringe pump/**, said syringe having a housing which slideably receives a plunger which when activated decreases or increases the pressure in a chamber defined by said plunger and said housing, said chamber opening through a sealing-member receiver, said receiver adapted to sealingly receive said sealing member and enable fluid communications between said chamber and said conduit in said sealing member (paragraph 0106; inherent feature of syringe to have plunger and pressure being related to movement of plunger with respect to housing)

Art Unit: 2853

*regarding claim 6, receiver is a stem protruding from said syringe housing (inherent feature of syringe to have a stem/needle/ like structure protruding)

*regarding claims 7 and 16, first end of said member defines a stem engaging internal surface for engagedly receiving and holding said stem of said syringe having a stem conduit narrows cross-sectionally from said second to first ends (fig. 9B & 11A; second end [upper portion where cap guide, 30 and tube, 40 meet, forming recovery cap, C] first end [lower part of tube, 40])

*regarding claim 10, second opening is adapted to fluidly communicate with a plurality of said ejection ports at once (paragraph 0081; fig. 18B)

*regarding claim 11, cross-sectional area of said second opening is larger than the cross-sectional area of said first opening (fig. 11A; paragraphs 0013 – 16)

*regarding claim 12, conduit widens cross-sectionally from said first end/**lower portion of tube, 40/** to said second end/**upper portion where cap guide, 30 and tube, 40 meet, forming recovery cap, C/** (fig. 9B & 11A)

*regarding claim 13, second opening is defined in a printhead engaging sealing surface, said sealing surface creating said sealed fluid communication with one of said plurality of said ejection ports/**ink passage, 41/** (fig. 11A & 11B; acting pressures 01-04 are in relation to an ejection port)

*regarding claim 14, pressure controller comprises a syringe/**syringe pump**/, said syringe having a housing which slideably receives a plunger which when activated decreases or increases the pressure in a chamber defined by said plunger and said housing, said chamber opening through a sealing-member receiver, said receiver adapted to sealingly receive said sealing member and enable fluid communications between said chamber and said conduit in said sealing member (paragraph 0106; inherent feature of syringe to have plunger and pressure being related to movement of plunger with respect to housing)

*regarding claim 15, receiver is a stem protruding from said syringe housing (inherent feature of syringe to have a stem/needle/ like structure protruding)

*regarding claim 19, second opening is adapted to fluidly communicate with substantially all of the plurality of ejection ports at once (fig. 11A; paragraphs 0013-0016)

*regarding claim 20, method for cleaning a print head/**ink ejection opening, Surface A**/ (paragraph 0093; fig. 3A) of an inkjet cartridge/**ink jet cartridge, 8**/ (fig. 1) of a printer (paragraph 0003), said print head having a plurality of ejection ports/**ink ejection openings, G**/ (fig. 3B & 4; paragraph 0093) thereon, comprising: (paragraph 0022 & 0024)

*administering suction to one of said ports to clean said at least one of said ports (paragraph 0106)

Art Unit: 2853

*regarding claim 21, simultaneously administering suction to all of said plurality of said ejection ports to clean said plurality (paragraph 0016; see also 0013-0015 and figures 9 – 11B for support information)

*regarding claim 22, method for cleaning a print head/**ink ejection opening, Surface A/** (paragraph 0093; fig. 3A) of an inkjet cartridge/**ink jet cartridge, 8/** (fig. 1) of a printer (paragraph 0003), said print head having a plurality of ejection ports/**ink ejection openings, G/** (fig. 3B & 4; paragraph 0093) thereon, comprising: (paragraph 0022 & 0024)

*simultaneously administering suction to all of said plurality of said ejection ports to clean said plurality (paragraph 0016; see also 0013-0015 and figures 9 – 11B for support information)

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotaki (US 2003/0007029) in view of Maerzke (US 5,709,253).

Kotaki disclose the following claimed limitations:

*regarding claim 4, second opening is defined in a printhead engaging sealing surface, said sealing surface creating said sealed fluid communication with one of said number of ejection ports (fig. 4)

Kotaki does not disclose the following claimed limitations:

*regarding claim 2, cross-sectional area of said second opening is smaller than the cross-sectional area of said first opening

*regarding claim 3, conduit narrows cross-sectionally from said first end to said second end

Maerzke discloses the following:

*regarding claim 2, cross-sectional area of said second opening is smaller than the cross-sectional area of said first opening/**tapered luer 9A/** (fig. 1; tapered luer/9A/ inserted into adapter/5/ for connection to print cartridge) for the purpose of forming a tight seal

*regarding claim 3, conduit narrows cross-sectionally from said first end to said second end/**tapered luer 9A/** (fig. 1; tapered luer/9A/ inserted into adapter/5/ for connection to print cartridge) for the purpose of forming a tight seal

It would have been obvious at the time the invention was made to a person having ordinary skill in the to utilize a cross-sectional area of said second opening is smaller than the cross-sectional area of said first opening; and conduit narrows cross-sectionally from said first end to said second end as taught by Maerzke into Kotaki for the purpose of forming a tight seal

18. Claims 8, 9, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotaki (US 2003/0007029) in view of Applicant's Admitted Prior Art (AAPA).

Kotaki discloses all the claimed limitations except for the following:

*regarding claims 8 & 17, syringe has an external engagement configuration comprising internal threads

*regarding claims 9 & 18, first end of said member includes an outer surface adapted to receive said internal threads of said syringe external engagement arrangement forming a seal therebetween

AAPA (in the specification) discloses the following:

*regarding claims 8 & 17, syringe has an external engagement configuration comprising internal threads (paragraph 0042) for the purpose of securing the needle to the body

*regarding claims 9 & 18, first end of said member includes an outer surface adapted to receive said internal threads of said syringe external engagement arrangement forming a seal therebetween (paragraph 0042) for the purpose of securing the needle to the body

It would have been obvious at the time the invention was made to a person having ordinary skill in the to utilize a syringe has an external engagement configuration comprising internal threads; and first end of said member includes an outer surface adapted to receive said internal threads of said syringe external engagement arrangement forming a seal therebetween as taught by AAPA into Kotaki for the purpose of securing the needle to the body

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Caren et al. (US 6,446,642) includes method to dislodge and remove particulates of an inkjet print head. Takata (US 6,247,782) includes a method of purging nozzle to prevent clogging using a protection cap and purging mechanism [suction]. Umeda et al. (US 2004/0155920) includes a purging unit and cap for suction of the print head to remove excess ink

Art Unit: 2853

in nozzles. Aulick et al. (US 5,510,820) includes a syringe having external engagement configuration with internal threads and connection of adaptor.

Communications with the USPTO

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rene Garcia, Jr. whose telephone number is (571) 272-5980. The examiner can normally be reached on M-F 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Rene Garcia Jr
14 March 2006



K. FIGGINS
PRIMARY EXAMINER